

sedge) *Birds of South Africa* 19 states "Sexes alike, the female slightly larger but size variable". Cave and Macdonald, *Birds of the Sudan* 1955 do not comment on the size. It is our experience at all the nests at Karen that the female, the bird that incubates the eggs, is the smaller bird. A number of local observers have checked on this point in recent years at Karen and we are unanimous in our decision. The male is a larger bird, rather obviously so; also brighter in plumage with apparently a greater extent of yellow on throat.

A resident young bird now between six and seven months old, is conspicuously smaller than the breeding birds, while its plumage is rather a dull warm brown on the wings and back and not the rich rufous-chestnut of the mature birds. The whole plumage is generally duller and the yellow on the throat and blue on the culmen are lacking.

Pitman (op. cit.) raises the subject of the posture of the head and neck in flight and our observations tend to confirm that generally the head and neck are somewhat extended when in flight, but we have seen the bird with neck held back, head down, and drawn into the shoulders. This latter posture may be part of a display pattern and often enough we have seen the birds adopt this posture over the pads during part of what might be described as a mating display, when the wings are raised and the birds tend to jump up in short flights. On the other hand because the head and neck are somewhat extended in flight the reader must not compare the extent and formation as being similar to that of a stork; yet the head and neck are not drawn in and hunched after the manner of a heron.

Erythropygia quadrivirgata and allied species

by C. W. BENSON AND C. M. N. WHITE

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Clancey (1960) recognises *E. q. rovuinae* and *E. q. wilsoni* as distinct from *E. q. quadrivirgata*. We have examined part of the material studied by Clancey, and a considerable body of further material, as listed below under measurements. Except for that of this species under (d) below, in which there is a tendency for the olive of the upperside to be slightly paler, but not sufficiently well differentiated to be worthy of subspecific recognition, we are unable to discern any colour-difference. That under (g) certainly shows a marked tendency to smallness, but we see no particular advantage in recognising *E. q. rovuinae* as distinct from *E. q. quadrivirgata* on this basis alone, especially as we are unaware of any discontinuity in distribution.

Wing and tail-measurements in mm. of material examined by us are as follows:—

<i>Wing</i>	<i>Tail</i>	<u>100 x tail</u>
		<i>wing</i>
	<i>E. signata tongensis</i>	
	False and Kosi Bays, and north-east Sibayi, Zululand	
3♂ 85, 85, 86	68, 72, 73	83.2

Wing

Tail

100 x tail

wing

E. q. quadrivirgata

(a) Zululand, Swaziland, Transvaal

4♂	81, 83, 83, 84	74, 76, 76, 76	} 88.9
3♀	79, 79, 86	68, 68	

(b) Eastern Southern Rhodesia (Nuanetsi to lower Pungwe)

7♂	83, 85(4), 86, 88	72, 72, 73, 75, 76, 76, 77	} 88.0
4♀	76, 78, 80, 82	68, 69, 71, 75	
1♂	83	72	

(c) Zambesi Valley below Victoria Falls; Luano Valley (Northern Rhodesia)

7♂	82, 84(3), 85, 86, 88	72, 72, 73, 73, 75, 75, 80	} 87.7
5♀	76, 78, 79, 81, 82	68, 69, 70, 70	

(d) Zambesi Valley above Victoria Falls, west to Sesheke; plateau country in Southern Province of Northern Rhodesia.

11♂	81, 83, 85(4), 87, 89(3), 90	71, 73, 76(3), 77, 80, 82, 83	} 90.0
7♀	77, 78, 79, 80, 80, 81, 85	67, 68, 70, 73, 73	

(e) Nyasaland (Chiromo southwards)

7♂	76, 76, 77, 82, 86, 87, 89	66, 66, 69, 75, 75, 76, 79	} 87.5
2♀	75, 75	63, 64	

(f) Tanganyika (75 miles north of Songea; Pugu Hills)

2♂	79, 81	72, 74	91.2
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(g) Coastal Kenya (Sokoke)

4♂	75, 79, 81, 81	63, 67, 72, 72	} 86.7
2♀	74, 76	65, 65	

E. barbata

Northern Rhodesia; two specimens from near Kigoma, Tanganyika

15♂	78, 82(3), 83(3), 84(4), 85(3), 86	61, 64(4), 65(3), 67, 68(4), 70	} 79.1
16♀	76, 78(3), 79(2), 80(3), 81(4), 82, 83(2)	60(2), 61, 62, 63(3), 64(3), 65(2), 66(2), 67	
3♂	79, 83, 85	61, 65, 66	

Tail-measurements are rather fewer than wing-measurements in some cases, due to the tails of some specimens being incomplete or in moult, and are therefore unrecorded above. Tail/wing ratios are of course calculated from the averages of tail and wing-measurements. The sample of *E. signata tongensis* is very small, so that the smaller ratio than in *E. quadrivirgata* may not be significant. Clancey indicates that the size-difference in Kenya birds from other populations of *E. quadrivirgata* is most marked in the much shorter tail-length. Certainly the ratio is lower than in any other population, but not markedly so, and all the figures are

in this respect relatively even. On the other hand, the ratio for *E. barbata* is significantly lower than in the *E. quadrivirgata* samples. The number of specimens available in all has been sufficiently large for it to be possible to assert with confidence that *E. barbata* has a proportionately shorter tail.

A few of the specimens of both *E. quadrivirgata* and *E. barbata* appear to have been mis-sexed, and in reality there is probably little overlap in measurements. Thus of 15 specimens of *E. barbata* from the Northern Province of Northern Rhodesia, practically all personally sexed by C.W.B., nine males have wing 82–86, tail 64–70 mm., six females have wing 78–83, tail 60–64 mm. Wing-length maxima for *E. barbata* are not quite so high as in most of the *E. quadrivirgata* samples.

E. signata and *E. quadrivirgata* appear to replace each other almost entirely geographically, but the colour-differences are so marked that they can hardly be regarded as conspecific. But we have in fact examined specimens of both collected by T. Oatley at False Bay, Zululand, and in addition a male from there which is clearly a hybrid, resembling *E. quadrivirgata* on the underside but with the rufous paler, with a greyish wash. On the upperside it resembles rather *E. signata*, but with the rump almost as rufous as in *E. quadrivirgata*. In the extent of white in the tail it is intermediate between the two. Its measurements are not included above. It has wing 85, tail 76 mm.

Oatley tells us that in Zululand, from St. Lucia estuary north to the boundary with Portuguese territory, *E. signata* typically inhabits dense undergrowth in coastal dune forests. By contrast, *E. quadrivirgata* is found in the undergrowth of isolated stands of closed forest west of this littoral area. In the south, at False Bay, where the hybrid was obtained, *E. quadrivirgata* invades in places the habitat of *E. signata*, while in the north, near the Portuguese border, *E. signata* invades to some extent that of *E. quadrivirgata*.

There is no evidence of hybridisation in the samples of *E. quadrivirgata* and *E. barbata*. In Northern Rhodesia, although there is no lack of suitable habitat, there appears in fact to be a gap between the two. Apart from the two specimens from the Luano Valley, *E. quadrivirgata* has been collected as far north as Lochinvar Ranch, only some 60 miles from a specimen of *E. barbata*, from 15 miles south-east of Mumbwa. Further west, in the Kafue National Park, *E. quadrivirgata* has been collected at Nakabula (16° 30' S., 26° E.), *E. barbata* at Chunga, 100 miles due north. In Nyasaland, they overlap to the extent that *E. barbata* occurs in the littoral of Lake Nyasa at Kota-Kota and again in the Karonga District, with intervening country in the Chinteché District occupied by *E. quadrivirgata* (Benson *et al.*, 1959). While *E. quadrivirgata* is confined to dense forest and thickets, *E. barbata* is frequently also found in open *Brachystegia* woodland.

As there are no published records of the breeding of *E. quadrivirgata* in Northern Rhodesia, it is worth mentioning that a specimen still in spotted juvenile dress was collected near the Kariba Dam on 12th December 1960. Also, J. M. C. Uys saw a nest containing two eggs in the Luano Valley on 27th November 1960. The nest was in the top of a stump, about four feet above the ground.

We are most grateful to Mr. M. P. Stuart Irwin, for the loan of the extensive material in the National Museum, Bulawayo; to Mr. P. A. Clancey, for the loan of material from the Durban Museum, including all the Kenya specimens; and to Mr. T. Oatley, for the loan of the specimens of *E. signata* and of *E. quadrivirgata* from Zululand.

To conclude, *E. signata*, *E. quadrivirgata* and *E. barbata* may be regarded as distinct species forming a superspecies, in which *E. leucosticta* can probably also be included.

References:—

- Benson, C. W., Irwin, M. P. Stuart and White, C. M. N., 1959. Some aspects of speciation in the birds of Rhodesia and Nyasaland. *Proc. First. Pan-Afr. Orn. Congr.*: 397-414.
- Clancey, P. A., 1960. Notes on geographical variation in the South African sub-continental *Erythropygia quadrivirgata* (Reichenow) populations. *Durban Mus. Novit.* 6 (2): 36-38.

A record of Dunn's Lark in the Lebanon

by JAMES M. HARRISON

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On 20th April, 1961, Dr. R. E. Lewis, of the American University of Beirut Museum of Natural History, obtained an example of the southern and south-western Arabian lark, *Ammomanes dunnii eremodites* Meinertzhagen, which had been shot on that day on the sands of Beirut International Airport.

Recognising the fact that this was an unusual bird, Dr. Lewis prepared the skin and brought the specimen with him to this country, generously presenting it to me.

The skin was compared with a good series of this species in the British Museum, Natural History, and was identified as belonging to the above form.

The specimen is an adult female and has the following measurements:—

W. = 88.5 (Type specimen = 86 mm.)

b., length from skull = 15.5 mm.

depth = 8.5 mm.

t. = 21.5 mm.

tl. = 51 mm.

This form was described by Colonel Meinertzhagen¹ in 1923, under the name *Pyrrhulauda eremodites* from a single specimen, an adult female obtained on 15th January, 1922, from Sheik Othman, Aden Protectorate. In his later work² the bird is placed by him in the genus *Ammomanes* as *A. dunnii eremodites*.

This example would appear to be the first record for the Lebanon and the most northerly record for the species to date.

I would express my very grateful appreciation to Dr. Lewis for asking me to identify the specimen and for presenting it to me, and to Mr. J. D. Macdonald of the British Museum, Natural History, for facilities for comparing the specimen with series in the National Collections.

¹ Meinertzhagen, R., 1923. *Pyrrhulauda eremodites*, sp. nov. *Bull. B.O.C.*, XLIII., 156-157.

² Meinertzhagen, R., 1954. *The Birds of Arabia*, 131.